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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,135	08/15/2005	Josette Masle	2251/73607/JPW/MJW	3638
23432	7590	06/14/2006	EXAMINER	
COOPER & DUNHAM, LLP 1185 AVENUE OF THE AMERICAS NEW YORK, NY 10036			KUMAR, VINOD	
			ART UNIT	PAPER NUMBER
			1638	

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/519,135

Applicant(s)

MASLE ET AL.

Examiner

Vinod Kumar

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-25 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-6, 9 and 10, drawn to a method of selecting a plant having enhanced transpiration efficiency, comprising detecting a genetic marker for transpiration efficiency which marker comprises a nucleotide sequence genetically linked to an ERECTA locus in the genome of the plant and selecting a plant that comprises or expresses the genetic marker, or wherein the transpiration efficiency phenotype of the plant is linked to the expression of marker in the plant.

Group II, claim(s) 1-5 and 7-10, drawn to a method of selecting a plant having enhanced transpiration efficiency, comprising detecting a genetic marker for transpiration efficiency which marker comprises a nucleotide sequence genetically linked to an ERECTA locus in the genome of the plant and selecting a plant that comprises or expresses the genetic marker, or wherein the transpiration efficiency phenotype of the plant is linked to a structural polymorphism in DNA.

Group III, claim 11, drawn to a method of selecting a plant having enhanced transpiration efficiency, comprising screening mutant or near-isogenic or recombinant inbred lines of plants to segregate alleles at an ERECTA locus; identifying a polymorphic marker linked to said ERECTA locus; and selecting a plant that comprises or expresses the marker.

Group IV, claim(s) 12-19, drawn to a method of enhancing the transpiration efficiency of a plant comprising introducing an isolated ERECTA gene or an allelic variant thereof or the protein-encoding region thereof to a plant and selecting a plant having different transpiration efficiency compared to a near-isogenic plant that does not comprise the introduced ERECTA gene or allelic variant or protein encoding region.

Group V, claim(s) 12-17 and 20-21 drawn to a method of reducing the transpiration efficiency of a plant comprising introducing an isolated *ERECTA* gene or an allelic variant thereof or the protein-encoding region thereof to a plant and selecting a plant

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having different transpiration efficiency compared to a near-isogenic plant that does not comprise the introduced *ERECTA* gene or allelic variant or protein encoding region.

Group VI, claim(s) 22 and 23, drawn to a plant having modified transpiration efficiency compared to a near-isogenic plant.

Group VII, claim(s) 24 and 25, drawn to an isolated *ERECTA* gene capable of determining or modulating the transpiration efficiency of a plant.

The inventions listed as Group I-VII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The technical feature linking Groups I-VII appear to be *ERECTA* gene capable of determining or modulating transpiration efficiency. However, Hainey et al. (NCBI, GenBank, Sequence Accession No. AY106598, Published May 25, 2002) teach a polynucleotide sequence encoding for a polypeptide which has 100% sequence identity to instant 44. The properties of determining or modulating transpiration efficiency is inherent to the polynucleotide encoding said polypeptide taught in the reference.

Therefore, the technical feature linking Groups I-VII does not constitute a special technical feature as defined by PCT Rule 13.2, as it does not define a contribution over prior art.

Accordingly, Groups I-VII are not so linked by the same or a corresponding special technical feature as to form a single general inventive concept.

Applicants are reminded that different nucleotide sequences and amino acid sequences are structurally distinct chemical compounds and are unrelated to one another. These sequences are thus deemed to normally constitute different inventive concepts.

For these reasons, Applicants are also required to elect one nucleotide sequence and its encoded polypeptide. In the instant case, for Groups I-II, IV and V, one nucleotide sequence and its encoded protein from SEQ ID NOs: 1-45; for Group VII, one of nucleotide sequence and its encoded protein from SEQ ID NOs : 11-45.

Accordingly, Groups I-VII are not so linked by the same or a corresponding special technical feature as to form a single general inventive concept.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinod Kumar whose telephone number is (571) 272-4445. The examiner can normally be reached on 8.30 a.m. to 5.00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Handwritten signature of Phuong T. Bui in black ink, with the date 6/8/06 written below it.

PHUONG T. BUI  
PRIMARY EXAMINER